

ZHEREBTSOV, L.; ZEBZEYEVA, A.G., red.

[From the miniature "Kosmos" to the giant dredge] Ot
maliutki "Kosmosa" do Dragi-velikana. Perm', Perm-
skoe knizhnoe izd-vo, 1964. 149 p. (MIRA 18:7)

ZABZIIYEV, K.V., dotsent

Toward new heights in technical progress. Izv.vys.ucheb.zav.;
gor.zhur. no.1:3-6 '60. (MIRA 13:6)

(Mining engineering)

ZEBZIYEV, K. V., dotsent

Complete mechanization in the mining industry and its results.
Izv. vys. ucheb. zav.; gor. zhur. no.10:85-95 '61.
(MIRA 15:10)

1. Sverdlovskiy gornyy institut imeni Vakhrusheva. Rekomendovana
kafedroy gornoy ekonomiki i planirovaniya proizvodstva.

(Mining machinery) (Automation)

ZEBZIYEV, K.V., dotsent

Theory of industrial processes in mining. Izv. vys. ucheb. zav.;
gor. zhur. 6 no.10:121-127 '63. (MIRA 17:2)

1. Sverdlovskiy gornyy institut imeni Vakhrusheva.

ASTAKHOV, Aleksandr Semenovich, kand. ekon. nauk; ZEBZIYEV, K.V.,
retsenzent; SOMINSKIY, K.V., retsenzent; POTEKIN, P.I.,
retsenzent

[Linear programming in mining] Lineinoe programmirovaniye
v gornom dele. Moskva, Izd-vo "Nedra," 1964. 143 p.
(MIRA 17:7)

VASIL'YEV, M.V.; V'YUKHINA, A.S.; DORONENKO, Ye.P.; ZEBZIYEV, K.V.,
kand. tekhn. nauk; LATS, V.M.; PARFENOV, G.V.; POPOV,
V.Ye.; TROITSKIY, D.P.; FADDEYEV, B.V.; TSVETAYEVA, Z.N.;
ZUHRIOV, L.Ye., kand. tekhn. nauk, otv. red.; MAKAROVA,
N.U., red.; PAL'MIN, M.Z., tekhn. red.

[Evaluation and the prospects of the development of the
mineral resources for ferrous metallurgy in Chelyabinsk area]
Otsenka i perspektivy razvitiia syr'evoi bazy chernoi metal-
lurgii Cheliabinskogo raiona. Sverdlovsk, AN SSSR, 1964. 67 p.
(MIRA 17:4)

ZEBZIYEV, K.V., dotsent; TSERENSHCHIKOV, P.T., inzh.

Economic estimate of the service life of mine haulage equipment
in strip mines. Izv.vys.ucheb.zav.; gor.zhur. 7 no.2:78-81 '64.
(MIRA 17:3)

1. Sverdlovskiy gornyy institut imeni V.V.Vakhrusheva. Rekomendo-
vana kafedroy ekonomiki i organizatsii gornoy promyshlennosti.

ZEBZIYEV, K.V., dotsent; TSEREMASHCHIKOV, P.T., inzh.

Put linear programming into the practice of planning and analysis
in mining. Izv. vyzn. ucheb. zav. i gor. zhur. 7 no. 10:51-55 '66.
(MIRA 18:1)

1. Sverdlovskiy goranyy institut imeni V.V. Vakhrushcheva. Rekomendatsiya
vana kafedroy ekonomiki i organizatsii gornogo proizvodstva.

ZEC, J.

Pancreatic abscess with extensive retroperitoneal spreading.
Acta chir. Jugosl. 12 no.1:86-91 '65.

1. Kirurška klinika Opće bolnice "Dr. Z. Kucic" -- Medicinski
fakultet Rijeka (Predstojnik doc. dr. V. Franciskovic).

8/044/62/000/011/002/064
A060/A000

AUTHOR: Zec, Milorad

TITLE: Application of the impulse function to the derivation of certain properties of characteristic functions .

PERIODICAL: Referativnyy zhurnal, Matematika, no. 11, 1962, 2, abstract 11B5.
(Statist. rev., 1961, v. 11, 32 - 38; Serbo-croatian; summary in French)

TEXT: The paper describes the application of the impulse function to the proof of certain well-known properties of characteristic functions. The impulse function $\delta(x)$ is an even function possessing the following two properties: if $f(x)$ is a function of bounded variation on a segment, then

a₁)
$$\int_{x_0-\epsilon}^{x_0} \delta(x - x_0) f(x) dx = \frac{1}{2} f(x_0 - 0),$$

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A060/A000

Application of the impulse function to

$$a_2) \quad \int_{x_0}^{x_0 + \epsilon} \delta(x - x_0) f(x) dx = \frac{1}{2} f(x_0 + 0);$$

$$b) \quad \int_{x_0 + \alpha}^{x_0 + \beta} \delta(x - x_0) f(x) dx = 0.$$

The point x_0 is a point of discontinuity or a point of discontinuity of the first kind of the function $f(x)$, ϵ is an arbitrarily small real number. The numbers α and β are real numbers of the same sign. The distribution function may be written in the form

$$F(x) = \int_{-\infty}^x \left[f(x) + \sum_j p_j \delta(x - x_j) \right] dx,$$

where $f(x)$ is a continuous function coinciding, with precision up to a posi-

Card 2/5

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A060/A000

Application of the impulse function to

tive factor, with the frequency function; the number p_j is the jump of the function $F(x)$ at the point x_j . According to the definition of the characteristic function set

$$\varphi(t) = \int_{-\infty}^{+\infty} e^{itx} dF(x), \quad dF(x) = \left[f(x) + \sum_j p_j \delta(x - x_j) \right] dx.$$

Let

$$I(c, y) = \frac{1}{2c} \int_{-c}^c \varphi(t) e^{-ity} dt.$$

One single method is used in the paper to prove a number of well known properties of characteristic functions. Here are some of them:

I. If:

$$\varphi(t) = \int_{-\infty}^{+\infty} e^{itx} dF(x),$$

Card 3/5

S/044/62/000/011/002/064

A060/A000

Application of the impulse function to

$$F(x) = \int_{-\infty}^x \left[f(x) + \sum_j p_j \delta(x - x_j) \right] dx ,$$

then

$$I = \frac{1}{2\pi} \int_{-\infty}^{+\infty} \varphi(t) e^{-1tu} dt = f(u) + \sum_j p_j \delta(u - x_j) .$$

II.

$$\frac{1}{2\pi} \int_{-\infty}^{+\infty} \varphi(t) dt = \left[f(x) + \sum_j p_j \delta(x - x_j) \right]_{x=0} .$$

III.

$$\varphi(0) = 1 .$$

IV.

$$\frac{1}{2\pi} \int_{-\infty}^{+\infty} \frac{1 - e^{-1tu}}{it} \varphi(t) dt = F(u) - F(0) .$$

Card 4/5

Application of the impulse function to

8/044/62/000/011/002/064
A060/A000

$$v. \quad \frac{1}{2\pi} \int_{-\infty}^{+\infty} \varphi^{(n)}(t) e^{-it^u} dt = i^n u^n f(u) + i^n \sum_j p_j x_j^u \delta(u - x_j) .$$

V.A. Sadovnichiy

[Abstracter's note: Complete translation]

Card 5/5

GVOZDENOVIC, M.; NIKULIN, E.; ZEC, Nj; KOSORIC, D.; MILADINOVIC, Z.

Kala azar (leishmaniasis visceralis) with muco-cutaneous lesions.
Acta med. iugosl. 15 no.3:863-871 '61.

1. Institute of Microbiology, Institute of Pathology and Pediatric
Clinic, Medical Faculty, University of Sarajevo.
(LEISHMANIASIS MUCOCUTANEOUS in inf & child)
(LEISHMANIASIS VISCERAL in inf & child)

ZEC, N.; RIMSKI, B.

The van Bogaert subacute sclerosing leucoencephalitis.
Bul. sc. Young 7 no.1/2:8 F-Apr '62.

1. Neuropsihijatrijska klinika Medicinskog fakulteta,
Sarajevo.

*

ZEC, M.

First symposium on the rehabilitation of the disabled of
Bosnia and Hercegovina; Sarajevo, October 30-31, 1961. I-II.
Bul se Youg 7 no.1/2, 10 F-Ap '62.

1. Neuropsihijatrijska klinika Medicinskog fakulteta,
Sarajevo.

*

SARVAN, M.; ZEC, N.; VASIC, D.; MAJSTOROVIC, M.; BOGDANOV, B.; HAKSTOK, V.

Medicine. Bul sc Youg 7 no.3:67-68 Je '62.

1. Medicinski fakultet, Sarajevo.

*

ZEC, N.; BOKONJIC, R.

Our experience with antidepressant drugs (preliminary communication).
Neuropsihijatrija 8 no.4:278-284 '60.

1. Neuropsihijatrijska klinika Medicinskog fakulteta u Sarajevu
(Sef: Prof. dr. Nedo Zec).

(PSYCHOPHARMACOLOGY) (DEPRESSION ther)

~~ZEC, Nedo, prof. dr.; BOKONJIC, Nenad, dr.~~

New method of peptic ulcer therapy with insulin shock. Med. glas. 8
no.11-12:425-431 Nov-Dec 54.

1. Neuropsihijatrijska klinika Medicinskog fakulteta u Sarajevu (sef
prof. dr. N.Zec)

(SHOCK THERAPY, INSULIN, in various dis.
peptic ulcer)

(PEPTIC ULCER, ther.
insulin shock ther.)

ZEC, Nedo, prof., dr.; DANILOVIC, Budimir, dr.; BOKONJIC, Risto, dr.

Neuroses among railway workers. Med. glasn. 15 no.2/2a:70-73 F '61.

1. Neuro-psijijatrijska klinika Medicinskog fakulteta u Sarajevu
(Upravnik: prof. dr N. Zec).

(NEUROSES statist) (RAILROADS)

BASAGIC, E.; CATOVIC, S.; ZEC.R.

Our experiences with Ulcosan in the treatment of gastrointestinal ulcer. Med. arh. 18 no.6:57-68 N-D'64.

1. II. interni klinika Medicinskog fakulteta u Sarajevu (Sef: Prof. dr. Miron Simic); Istrazivacka laboratorija tvornice "Bos-nalijek".

ZEC, Risto, dr.; HERLINGER, Ivo

Recurrent pneumonias caused by bronchial occlusions. Med. arh. 15
no. 3:143-146 My-Ja '61.

1. II interna klinika Medicinskog fakulteta u Sarajevu (Sef: prof.
dr Miron Simic) Otolaringološka klinika Medicinskog fakulteta u
Sarajevu (Sef: prof. dr Zarko Prastalo).
(PNEUMONIA etiol)

JEVTIC, Zivojin, doc. dr.; MAROVIC, Drago, dr.; ZEC, Risto, dr.; POPOVIC, Vojin, dr.

Tin therapy of taeniasis. Med. glas. 13 no. 11: 547-549 B '59.

1. II Interna klinika Medicinskog fakulteta u Sarajevu, upravnik:
prof. dr. M. Simic.

(TIN ther.)

(TAPEWORM INFECTIONS ther.)

ZEC, R.; LAZOVIC, V.; SIMIC, M.

Our experience with liver cirrhosis. Med.arh., Sarajevo 14 no.6:103-116 N-D '60.

1. II Interna klinika Medicinskog fakulteta u Sarajevu (Sef: prof. d-r Miron Simic)
(LIVER CIRRHOSIS case reports)

JEVTIC, Z., doc. dr.; BUCIC, M., prof. dr.; ZEC, R., dr.; LAZOVIC, V., dr.

6 fatal cases in atabrine therapy of taeniasis. Med. glas.
16 no.6/6a:285-287 Je '62.

1. Institut za Sudsku medicinu u Sarajevu (Upravnik: prof. dr.
M. Bucic). (QUINACRINE) (TAPEWORM INFECTION)

5

ZEC, R.; REZAKOVIC, D.; IBRAHIMBEGOVIC, F.

Clinical contribution to megaloblastic anemia in pregnancy. Med.arh.,
Sarajevo 14 no.7:67-73 Ja '61.

1. Interna klinika Medicinskog fakulteta u Sarajevu - II odjeljenje
(Sef: prof. d-r Miron Simic)
(PREGNANCY compl)
(ANEMIA HYPERCHROMIC in pregn)

DVORNIK, I.; POSAVEC, V.; ZEC, U.

Experimental source of gamma radiation in the Ruder Boskovic
Institute; abstract. Glas Hem dr 27 no.9/10:551 '64

1. The Ruder Boskovic Institute, Department of Radiochemistry
Zagreb.

DVORNIK, I.; ZEC, U.

Spectrophotometric measurement of HCl traces in nonaqueous systems, and its application in the radiation chemistry of organic liquid systems; abstract. Glas Hem dr 27 no.9/10: 545 '64

1. The Ruder Boskovic Institute, Department of Radiochemistry , Zagreb.

BUKUROV, Stanislav; PESIC, Radoslav; KARADZIC, Aleksander; ZECEVIC,
Borivoje.

Cancer of the head of the pancreas. With special reference
to physiopathology and therapy. Srpski arh. celok. lek. 91
no. 6:565-573 Je'63.

1. I hirurska klinika medicinskog fakulteta Univerziteta u
Beogradu. Upravnik: prof.dr. Bogdan Kosanovic.

*

BUKUROV, Stanislav; KARADZIC, Aleksandar; ZECEVIC, Bozidar

Carcinoma of the breast. Srpski arh. celok. lek. 91 no.2:
123-134 F '63.

1. I hirurska klinika Medicinskog fakulteta Univerziteta u
Beogradu Upravnik: prof. dr. Bogdan Kosanovic.
(BREAST NEOPLASMS) (MASTECTOMY)

5

YUGOSLAVIA

Stanislav BUKUROV, Aleksandar KARAGJIC and Bozidar ZECEVIC, First Surgery
Clinic of Medical Faculty of University (I hirurska klinika Medicinskog
fakulteta Univerziteta) Head (Upravnik) Prof D^r Bogdan KOSANOVIC, Belgrade.

"Mammary Carcinoma."

Belgrade, Srpski Arhiv za Celokupno Lekarstvo, Vol 91, No 2, Feb 63;
pp 123-134.

Abstract [English summary modified]: Discussion of many pathogenetic,
diagnostic, surgical and prognostic aspects. Of 253 patients operated
upon 1947-1956, most with subsequent irradiation treatment, only 141
could be traced for follow-up; average 5-year survival was 77 (62.6%).
Clinical data are tabulated in many ways - parity, age, stage and duration
of tumor at diagnosis, treatment and results according to stage at diag.
and operation. Eight tables; 6 Soviet and 39 Western references.

1/1

KOSANOVIC, Bogdan; STEFANOVIC, Branislav; ZECEVIC, Bozidar

Intrathoracic neuroma. Srpski ark. celok. lek. 91 no.12:1223-1227
D '63.

1. I hirurska klinika Medicinskog fakulteta Univerziteta u Beogradu
(Upravnik: prof. dr. Bogdan Kosanovic).

ZECEVIC, D.

A contribution to the study of fishing at Muo, a settlement of fishermen in Kotorski
Zaliv. p. 545
(GLASNIK. Vol. 2/3, 1954/53. (Published 1957)

SO: Monthly List of East European Accessions (EEAL) LC. Vol. 6, No. 12, Dec. 1957
Uncl.

ZECEVIC, D.

Yugoslavia (430)

Novelties in the structure of German tracks, p.163.
TEHNICKI PREGLED. (Croatia. Uprava za unapredenje
proizvodnje pri privednom savjetu) Zagreb. (Bimonthly
technical journal issued by the Production Improvement
Administration of the Economic Council) Vol. 8, no. 5,
May 1952.

East European Russian Accessions, Library of Congress,
Vol. 2, No. 6, June 1953, Unclassified

ZECEVIC, D.

Yugoslavia (430)

Technology-Periodicals

Novelties in the structure of German tracks.
p. 163. ZELEZNICE. (Jugoslavenske zeleznice)
Beograd. (Monthly on railroad problems issued
by the Yugoslav railways) Vol. 8, Nol 5, May, 1952.

East European Accessions List. Library of Congress
Vol. 2, No. 6, June 1953. Unclassified.

ZECEVIC, F.

Economic aspects of operating the Kabotovci Agricultural Cooperative, district of Banja Luka, as shown in its final accounting in 1957. p. 373.

Periodical: POLJOPRIVREDNI PREGLED.

Vol. 7, no. 9/10, Sept./Oct. 1958.

AGRICULTURE

SO: Monthly List of East European Accessions (EEAI) LC

Vol. 8, No. 4
April 1959, Uncl.

ZECEVIC, F.

Economic analysis of the production experiments with winter wheat carried out in 1957/58 on some agricultural estates. p. 436

POLJOPRIVREDNI PREGLED. (Društvo poljoprivrednih inženjera i tehnicara Bosna i Hercegovine) Sarajevo, Yugoslavia. Vol. 7, no. 11/12, Nov./Dec. 1958

Monthly List of East European Accession (EEAL) IC, Vol. 8, no. 6
June 1959
Uncl.

ZECEVIC, Ilijana; KARAKUSEVIC, Milica; KONSTANTINOVIC, Ivan;
MILJANIC, Milos

Effect of drinking of Bukovicka Banja mineral water on the
renal elimination of water and electrolytes. Srpski arh. celok.
lek. 90 no.9:833-838 S '62.

1. Balneo-klimatoloski institut NR Srbije u Beogradu Direktori:
doc. dr. Vlastimir Godis.
(WATER ELECTROLYTE BALANCE)
(MINERAL WATERS) (DIURESIS)

5

YUGOSLAVIA

Ilijana KRCEVIC, Milica KARAKUSEVIC, Ivan KONSTANTINOVIC, and Milos
WILJANIC, Institute of Balneology and Climatology (Balneo-klimatoloski
institute) People's Republic of Serbia (NR/Narodna Republika/ Srbija)
Director (Direktor) Docent Dr Vlastimir GOVIC, Belgrade.

"Effects of Drinking Mineral Water from the Spa Bukovicka Banja onto
Renal Water and Electrolyte Excretion."

Belgrade, Srpski Arhiv za Celokupno Lekarstvo, Vol 90, No 9, Sept 1962;
pp 832-838.

Abstract [German summary modified]: Study in 6 men aged 25 to 35
during 20 days; drinking mineral water, excretion of K, Na, Cl, Ca,
Mg and H₂O; comprehensive statistical treatment. Diuresis and
phosphaturia increased. Discussion. Eight tables, 2 Yugoslav and
2 French references.

ZECEVIC, Lj.

"Effect of Technical DDT on the First Growth Stages of Maize" p. 57
(ZBORNIK RADOVA, Vol. 25, no. 2, 1952, Beograd, Yugoslavia)

SO: Monthly List of East European Accessions, Library of Congress, Vol. 2,
No. 10, October, 1953, Unclassified

ZECEVIC, Nasto, Dr.

Indications for Cesarean section. Med. arh., Sarajevo 11
no.1:85-98 Jan-Feb 57.

1. Ginekolosko-akusersko odeljenje Sreske bolnice u Nisu
Sef: dr. Nasto Zecevic.
(CESAREAN SECTION
indic. (Ser))

ZECEVIC, Nasto, dr.

Extrauterine pregnancy in the pathology of gynecological diseases
in Southeast Serbia. Med. arh., Sarajevo 8 no.4:51-65 July-Aug 54.

1. Ginekolosko-akusersko odjeljenje Nis, sef Dr. Nasto Zecevic.
(PREGNANCY, ECTOPIC, statist.
Yugosl.)

ZECEVIC, Nasto; PAVLOVIC, Stanoje

Our experience with Madlener's sterilization. Srpski arh. celok.
lek. 88 no.5:513-516 My '60.

1. Ginekolosko-akusersko odeljenje Opste bolnice u Nisu. Sef: dr
Nasto Zecevic.

(STERILIZATION SEXUAL)

ZECEVIC, Nasto; PAVLOVIC, Stanoje

Torsion of sarcoma of the tube in a girl 11 years of age. Srpski
arh. celok. lek. 88 no.6:711-713 Je '60.

1. Ginekolosko-akusersko odeljenje Opste bolnice u Nisu. Saf: dr
Nasto Zecevic.

(SARCOMA in inf & child) (FALLOPIAN TUBES neopl)

ZECEVIC, Nasto, dr.; GANIC, Ruzica, dr.; STOJKOVIC, Dragica, dr.

Natural delivery in a woman with previous cesarean section. Med.
glasn. 15 no.5:224-226 My '61.

1. Ginekolosko-akusersko odeljenje Bolnice u Nisu (Upravnik: prim.
dr N. Zecevic).

(CESAREAN SECTION) (DELIVERY)

ZECEVIC, Nasto, dr.; LAZIC, Dragan, dr.; JORDANCEVIC, Jovan, dr.

Meconium peritonitis. Med. glasn. 15 no.7/8:348-350 J1-Ag '61.

1. Ginekolosko-akusersko odeljenje u Nisu (Sef: prim. dr N. Zecevic).
Ortopedsko-hirursko decje odeljenje u Nisu (dr M. Mitrovic).

(PERITONITIS in inf & child) (MECONIUM)

ZECEVIC, Snezana

"Economy of the operations of a station" by G.K. Naumov, N.I. Silayev [Silayev, N.I.], N.Ya. Stefanov, P.S. Ushakov, N.T. Cernuha [Chernukha, N.T.], and L.D. Berzagal [Berzhigal, L.D.]. Reviewed by Snezana Zecevic. Zeleznice Jug 19 no.4:49-51 Ap '63.

CA

The sulfuric acid ester salt of cyclohexanone oxime. Zoltán Csuros, Konstantin Zech, and Sára Zech (Univ. Tech. Sci., Budapest, Hung.). *Acta Chim. Hung.* 1, 83-93 (1951) (in German); cf. preceding abstr. — The structure of the H_2SO_4 ester salt of cyclohexanone oxime (I) prepd. from I and N_2SO_4H

(IA) or from cyclohexanone and H_2NOSO_2H was examd. Cyclohexanone with sulfoperamidic acid in the presence of an equiv. amt. of alkali as described by Knoll (cf. Ger. patent 540,409, *C.A.* 26, 3243), gave a product identical to that obtained by treating I with IA. Catalytic hydrogenation of this product proved that it is not a deriv. of ϵ -aminocaproic

acid lactam but a H_2SO_4 ester salt (II) of I, $(C_6H_{11}O_2N)_2C_2H_4N_2SO_4K$. Catalytic hydrogenation of II gave cyclohexylamine and dicyclohexylamine. II was surprisingly sensitive to alkali, which is unusual for a ketoxime H_2SO_4 ester salt. This is caused by the cleavage which is effected not only by mineral acids but also by alkalis with a simultaneous rearrangement. The cleavage products were ϵ -leucine lactam and $KHSO_4$. The H_2SO_4 group is cleaved in this case, differing from other ketoxime H_2SO_4 ester salts, not as a salt of sulfoperamidic acid but as a H_2SO_4 salt, leaving N on the residue. István Finály

ZECH, KONSTANTIN
ZOLTAN CSUROS, Magyar Chem. Folyoirat 47, 91-111, 1941

Acyl derivatives of cyclohexanone oxime, with special regard to the Beckmann rearrangement. Zoltán Csuros, Konstantin Zsch, Gyula Dely, and Erel Zalay (Univ. Tech. Sci., Budapest, Hung). *Acta Chim. Hung.* 1, 66-83 (1981) (in German).—When cyclohexanone oxime (I) was treated with various acids of various concentration with no solvent or with CHCl_3 , $\text{CHCl}_2\text{CHCl}_2$, or C_6H_6 , the mixt. cooled with CHCl_3 , the solvent evapd., and the residue distd. is treated with CHCl_3 , the reaction products were either lactams, or oximes and lactams together, in 22.0-90.0% yields. By known methods the product of rearrangement can be obtained in high yields by the reaction of 0.86 mol. H_2SO_4 with 1.0 mol. oxime at the lowest possible concentration of H_2SO_4 (63.3% as compared to 75% stated by other authors). P_2O_5 , PCl_5 , and H_3PO_4 are suitable for rearranging the oxime. SOCl_2 also effects the rearrangement; the rate of rearrangement depends, however, on the nature of the solvent used. New esters of I were prepd. by treating the *N*-derivative (II) of I with various acid chlorides. They can be classified in 4 groups: (a) esters which on hydrolysis yield I; (b) esters of bivalent acids behaving like the group (a), except for the disulfide compd.; (c) esters which give cyclohexanone and a peroxy acid or H_2O_2 when hydrolyzed; and (d) esters which give the Beckmann rearrangement. The following compds. were prepd.: I acetate, bp 130°, was obtained in 90.3% yield from I, $\text{C}_6\text{H}_5\text{N}$, CHCl_3 , and AcCl after shaking out with water and evapd. the CHCl_3 phase. II (100%) was obtained by treating I with NaNH_2 in C_6H_6 soln. I isocyanate (81.4%) was obtained by treating a suspension of II in C_6H_6 with iso-BuCOCl. Similar treatment of II with COCl_2 gave 94.4% I oxalate. I sulfide (88-90%) was obtained from II and SOCl_2 , whereas II and SOCl_2 gave 83% I sulfide, m. 71°. Treatment of II with CS_2 and recrystn. of the product from Me_2CO gave the disulfide compd. ($\text{C}_6\text{H}_{10}\text{N}_2\text{S}_2$) (III), m. 62°. Hydrolysis of III gave a mixt. from which approx. equal amounts of I and cyclohexanone could be sep'd. I benzene (91.2%) and cyclohexanone could be sep'd. I benzene (91.2%) was obtained from I in abs. C_6H_6 with BrCl . I *N*-acetate (90.8%) was obtained from II with $\text{EtO}(\text{C})\text{OCl}$. I benzene/sulfonate (almost 100%), m. 16°, was obtained from II with PhSO_2Cl . I 2-*acetyl*-sulfonate (83.7%), m. 51°, was obtained from II with 2- $\text{C}_6\text{H}_4\text{SO}_2\text{Cl}$. I 4-*toluenesulfonyl* (97.8%), m. 60°, was obtained from II with $p\text{-MeC}_6\text{H}_4\text{SO}_2\text{Cl}$. I 4-*toluenesulfonyl* was obtained in liquid form from II with $p\text{-MeC}_6\text{H}_4\text{SO}_2\text{Cl}$. II treated with picryl chloride, gave 85.6% I picrate (IV), m. 51°. IV boiled 5 hrs. in $(\text{CH}_3\text{Cl})_2$ rearranged to the *N*-picryl lactam, m. 175°. Finally

ZECH, SARA,

ZOLTAN CSUROS, Acta Chim. Hung. 1, 83-93 (1951)

SZYMCZAK, Jozef; ZECHALKO, Alicja

Determination of minute amounts of arsenic in food and articles of common consumption. Roczn panstw zakl hig 14 no.3:239-244 '63.

1. Department of Food Articles, School of Medicine, Wroclaw.

JASINSKA, M.; ZECHAŁKO, A.; SZYMCHAK, J.

Arsenic content of foods grown near the arsenic mine in Zlaty
Stok. Cesk. hyg. 10 no.3:227-232 My '65

1. Lekarska akademie Vratislav, Polsko.

VYTASIL, V.; JANECEK, J.; SVACINA, J.; ZECHEL, B.

Enamels colored with cadmium colors. Silikaty 6 no.3:245-257
'62.

1. Sfinx Ceske Budejovice, n.p.

PARADA, V.; SHELEVENKO, G. (Kalinin); CHEVYCHELOV, P.; ZEDCHENIDZE, G.;
SYSKO, Yu.

Readers' letters. Pozh.delo 10 no.2:30 F '64. (MIRA 17:3)

1. Nachal'nik Upravleniya pozharnoy okhrany UzSSR (for Parada).
2. Instruktor Ryazanskogo oblastnogo Dobrovol'nogo pozharnogo obshchestva (for Chevychelov).

P/025/60/000/009/001/002
D003/D101

AUTHORS: Gomulczyński, Józef, Master, Zechenter, Jan, Master
Engineer, Gierlaszyńska-Czerwńska, Stanisława, Master,
and Kasza, Adam

TITLE: Instructions for cement tests and determination of
cement properties for the needs of the petroleum indus-
try

PERIODICAL: Nafta, no. 9, 1960, 244-249

TEXT: The article contains a detailed description of cement testing
procedures in the petroleum industry. The new instructions are
based on the official instructions issued by the Stowarzyszenie
Naukowo-Techniczne Inżynierów i Techników PN (Scientific and Techni-
cal Association of Polish Petroleum Engineers and Technicians), on
US standards (API) and on Soviet standards (GOST). Individual
paragraphs of the instructions are dedicated to cement sampling and
necessary instrumentation, fineness specifications for cement used
in bore holes, preparation of cement slurry for testing, determina-

Card 1/2

Instructions for cement tests...

P/025/60/000/009/001/002
D003/D101

tion of the specific gravity of slurry, filtration tests, setting time requirements, consistometer tests of cement samples and determination of mechanical properties of cement. The article closes with a facsimile of a test certificate. Upon approval by the Zjednoczenie Przemysłu Naftowego (Petroleum Industry Union), the instructions will be obligatory for the entire petroleum industry. There are 4 figures and 3 tables.

Card 2/2

MISCHKE, Kazimierz, mgr.,inz.; HOLANSKI, Zygmunt, inz.; PTAK, Marian,
mgr.,inz.; WOJCIK, Jozef, mgr.,inz.; ZECHENTER, Jan, mgr.inz.

A Preliminary instruction on cementing. Prace Inst naft no.69:13-
26 '61.

ZECHEVICH

YUGOSLAVIA/General Biology - Genetic

Abc Jour : Ref Zhur - Biol., No 5, 1953, 19111

Author : Zechевич

Inst :

Title : Additional Chromosomes in Inbred Lines of Zea mays L.
I. Behavior of Additional Chromosomes in the First
Meiotic Division in Lines. I₁ Generation.
A Preliminary Communication.

Orig Pub : Glasnik biol. ser. Hrvatsko prirodosl. drustvo, 1953,
(1955), Ser. 2B, 7, 382-383

Abstract : No abstract.

Card 1/1

SHAROV, Vladimir Semenovich; AL'PER, N.Ya., rednentsent; ZECHIKHIN, D.B.,
red.; BORUNOV, N.I., tekhn. red.

[Electromechanical inductor-type alternators] Elektromashinnye in-
duktornye generatory. Moskva, Gos. energ.izd-vo, 1961. 143 p.
(MIRA 14:11)

(Electric generators)

ZEMCHIKHIN, Boris Semenovich, assistant

Magnetic field in the gap of an induction machine under no-load
operating conditions, Izv.vys.ucheb.zav.; elektro-mekh. 3
no.1;73-83 '60. (MIRA 13:5)

1. Kafedra aviatsionnykh elektricheskikh mashin Moskovskogo
aviatsionnogo instituta.
(Electric motors, Induction) (Magnetic fields)

S/144/60/000/01/009/019
E194/E155

AUTHOR: Zechikkin, B.S., Assistant

TITLE: The Magnetic Field in the Gap of an Inductor Machine₂₉
under No-load Conditions

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy,
Elektromekhanika, 1960, Nr 1, pp 73-83 (USSR)

ABSTRACT: The operating principles of an inductor machine are briefly explained with reference to Figs 1 and 2. The article describes an analytical method of determining the magnetic field in the air gap of such a machine for an arbitrary distribution of m.m.f. along the air gap; and a relationship is given between the field strength and the height of the rotor pole. The simplifying assumptions made are stated. They are the ones usually adopted in the analysis of electrical machines, and lead to results of sufficient accuracy for practical purposes. The m.m.f. at the rotor surface is taken as unity, which does not alter the nature of the field distribution in the air gap. The pitch of the rotor teeth is assumed constant and this also does not make the solution less general. As the configuration of the air gap is cyclic,

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✓

S/144/60/000/01/009/019
E194/E155The Magnetic Field in the Gap of an Inductor Machine under
No-load Conditions

the field distribution may be found by determining the m.m.f. as a function of the coordinates for the region illustrated diagrammatically in Fig 3. It is assumed that this function satisfies the Laplace equation with the boundary conditions given by expression (3). To solve the problem the m.m.f. function is represented as the product of two functions, using the Fourier method. Finally, expression (41) is derived for the m.m.f. as a function of the geometrical coordinates. The interesting components of the induction are those normal to the stator surface, particularly the constant component and the first harmonic, which are given by expressions (43) and (44) respectively. These expressions may be somewhat simplified by the use of Eq (45). If the fourth and higher terms are rejected, the consequent error in the sum of the series on the right-hand side of Eq (45) is 7%, which is acceptable for practical purposes. Values of the constant component of magnetic flux are plotted in Fig 5, and compared with values obtained by

Card
2/3

S/144/60/000/01/009/019

E194/E155

The Magnetic Field in the Gap of an Inductor Machine under
No-load Conditions

the method of conformal representation, which are plotted by dotted lines. Results obtained with an electro-magnetic integrator are shown chain-dotted. The greatest difference between results obtained by the analytical method described in this article and by the accurate method of conformal representation is 8.5%. Thus, the analytical method provides a semi-graphical method of determining the induction as a function of the height of the rotor pole and is sufficiently accurate for practical purposes.

Card
3/3

There are 6 figures, no tables, no references.

ASSOCIATION: Kafedra aviatsionnykh elektricheskikh mashin,
Moskovskiy aviatsionnyy institut
(Chair of Aviation Electrical Machines,
Moscow Aviation Institute)

SUBMITTED: February 11, 1959

ZECHIKHIN, B.S., inzh.

Magnetic field in the gap of an inductor generator with a
pulsating induction flux of the rotor dents. Trudy MAI
no.133:120-140 '61. (MIRA 14:5)

(Electric generators)

ZECHIKHIN, Boris Semenovich, kand.tekhn.nauk, ispolnyayushchiy ob-
yazannosti doklanta; PAVLOVA, Korneliya Nikolayevna, stu-
dentka-diplomnitsa

Magnetic field in the air gap of an inductor machine with a
comb-type toothed zone. Izv. vys. ucheb. zav.; elektromekh.
6 no.8:907-916 '63. (MIRA 16:9)

1. Moskovskaya ordena Lenina aviatsionnyy institut.

ZECHMEISTER, Antonin

Macroscopics and microscopics observations of muscular
(myocardial) bridges and loops over coronary arteries
of dogs. Cesk. morf. 13 no.1:1-11 '65

1. Institute of Anatomy, Faculty of Medicine, J.E.Purkyne
University, Brno.

... ..

ZECHMEISTER

Chemical Abst.
Vol. 48 No. 3
Feb. 10, 1954
Organic Chemistry

Fortschritte der Chemie Organischer Naturstoffe. Vol.
IX. Edited by M. Zechmeister. Vienna: Springer-Verlag.
1952. 635 pp. \$19.75. cl. U.S. 43, 8397c.

COMMON ELEMENTS																									
PROCESSING AND PRESENTATION INDEX																									
<div style="display: flex; justify-content: space-between;"> CA 12 </div> <p>Carotenoids of Hungarian wheat flour. L. Zechmeister and L. Cholnoky. <i>J. Biol. Chem.</i> 135, 81-8 (1940). Unbleached wheat flour from southern Hungary is valueless as a provitamin A source since it contains no more than 0.01 mg. of carotene per kg., if any, and is free from cryptoxanthine. Xanthophyll (lutein) is practically the only polyene present. By repeated application of the chromatographic method, 15 mg. of pure xanthophyll crystals was isolated from 90 kg. of flour. A. P. Lothron</p>																									
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BDR

13717 Progress in the Chemistry of Organic Natural Products. Vols. VI and VII. L. Zechmeister, editor. 392 and 340 pages. 1950. Springer-Verlag, Vienna, Austria. (QD245 F77c)

Consists of a series of review articles as follows: Vol. VI: "Some Biochemical and Nutritional Aspects in Fat Chemistry", H. J. Denzel, Jr. and S. M. Greenberg; "Animal Odors and Pheromones" (French), E. Lederer; "Occurrence and Biochemical Behavior of Quinone" (German), O. Hoffman-Ostenhof; "Cactus Alkaloids and Some Related Compounds", L. Bell; "Plant Proteins", J. Bonner; and "Recent Progress in the Fluorescence Spectrochemistry of Biological Products" (French), Ch. Dhéré. Vol. VII: "Concerning the Constitution of Triterpene" (In German), O. Jeger; "Constitution, Configuration, and Synthesis of Digitaloid Aglycones and Glycosides" (In German), H. Heuser; "Thyroxine and Related Compounds", C. Niemann; "Penicillin and Its Place in Science", A. H. Cook; "Sennosides A and B, the Active Principles of Senna", A. Stoll and B. Becker; and "Some Recent Developments in the Chemistry of Anthracenes", J. W. Williams.

COMMON ELEMENTS										PROCESS AND PROPERTIES INDEX										COMMON MATERIALS INDEX									
<p>bc</p>										<p>A-4</p>																			
<p>Lipochromes of fat. Zamenhof and P. Turson (Oxyd. Med. 1914, 70, 115-116).—The fat of the cow and horse contains, respectively, 11 and 6 mg. per kg. of oxystone (1) and 10 and 12 mg. per kg. of (1)-free xanthophyll. The lipochromes of human fat are identical with those in the plants from which they originate. (1) Oxystone, Hurn, Ann. (n).</p>																													
<p>ASTM-A METALLURGICAL LITERATURE CLASSIFICATION</p>																													
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110									
PROCESSES AND PROPERTIES INDEX									
<p>The petal pigment of <i>Calendula officinalis</i>. László Zechmeister and László Cholnoky. <i>Mathemat. Termékek</i> 49, 181-8 (1962).—Extn. of the petals with alc. and sapon. of the ext. with MeOH-KOH gave xanthophylls, carotene and lycopene; the last was found for the first time in non-fruit material. Carotene has spectrum lines at 530-12 and 483-6 mμ, [α]_D²⁰ (benzene) 20°. Lycopene has spectrum lines at 564-38, 516-407 and 482-67 mμ. The xanthophyll showed lines at 510-493 and 481-63 mμ; its ether soln. when underlayered with a 25% HCl soln. gave a beautiful dark blue color.</p> <p>S. S. de Finály</p>									
<p>ASA-SLA METALLURGICAL LITERATURE CLASSIFICATION</p>									

The partial hydrolysis of polysaccharides. LASZLO ZECHMEISTER. *Math. naturw. Anz. ung. Akad. Wiss.* 48, 443-60(1931)—Cellulose was hydrolyzed with cold concd. HCl. The treatment was interrupted after 3-4 hrs. by means of Ag_2CO_3 and a hydrolyzate of a complicated compn. was obtained ranging from dextrin insol. in water to sucrose. A water-alc. mixt. could be used for the sepn. of this complex and cellulobiose, cellobiose, cellobetraose and cellobexaose were obtained in cryst. form. The data of Willstätter on tri- and tetraoses were approved. The oligo-saccharides could be characterized by the deriv.: acetates of all sugars and phenylsazones of tri- and tetraoses. The expts. support the *chain structure of cellulose*. Also lichenin and chitin could be decomp. with HCl. The acetylation of the products of their partial hydrolysis gave cryst. compds. S. S. DE FINELY

S. S. DE FINALE

ASAC-364 METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND COLUMNS										3RD AND 4TH COLUMNS									
PROCESSES AND PROPERTIES INDEX																			
<p>ca</p> <p>The petal pigment of <i>Urtica dioica</i> L. László Zechmeister and László Cholnoky. <i>Matematika. Természettud. Füzetek</i> 40, 181-3 (1932).-- Extn. of the petals with alc. and safran. of the ext. with MeOH-KOH gave xanthophylls, carotene and lycopene; the last was found for the first time in non-fruit material. Carotene has spectrum lines at 530-53 and 465-6 mμ. (alc. benzene) 20". Lycopene has spectrum lines at 554-58, 516-497 and 452-67 mμ. The xanthophyll showed lines at 510-403 and 481-63 mμ; its ether soln. when underlayered with a 25% HCl soln. gave a beautiful dark blue color. S. S. de Finály</p>																			
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<p>ASTM-SLA METALLURGICAL LITERATURE CLASSIFICATION</p>																			
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PRINCIPAL AND SUBPRINCIPAL INDEX																																																			
<p>Chemical examination of the red pigments of some autumn fruits. LÄNNIG ECHEN- WINTER AND LÄNNIG CHOLNOKY. <i>Mathematik. Is Termisettend. Exentis 57, 200 17</i> (German abstract 210)(1930); cf. C. A. 24, 3823, 4301. Sixty kg of <i>Lycium halimifolium</i> gave 17 g. of a cryst. pigment, the compn. of which was found to be $C_{11}H_{10}O_2$. It is identical with the physalene of Kuhn and Wiegand. No secondary pigments were found. Fruits of <i>Tamus communis</i> contained lycopine, also fruits of <i>Solanum dulcamara</i>. Arillus of <i>Eronimus europaeus</i> contained a xanthophyll-like pigment of the compn. $C_{40}H_{56}O_4$. Examn. of other fruits, e. g., <i>Arum maculatum</i> and <i>Sorbus aucuparia</i> is in progress. S N DE FINALEY</p>																																																			
<p>ASS-52A METALLURGICAL LITERATURE CLASSIFICATION</p>																																																			
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BC

17-1

Crystallization of potassium chloride from the fused state. Preparation of large monocrystals of sylvine. E. Y. ZECHNOVITZER (J. Phys. Chem. Russ., 1937, 9, 917-928).--KCl monocrystals with a diameter of 8-15 cm. were grown by the method of Kyropoulos, i.e., by drawing from the fused salt.
E. R.

ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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ZECHMEISTER, O.

(Brno)

Survey of shearing and cutting technology. Jemna mach opt 9
no.7:224-226 JI '64

ZECINER, L.

Chemical Abst.
Vol. 48 No. 9
May 10, 1954
Biological Chemistry

③

Glycosidal contents of *Cynanchum vincetoxicum*, II. Glycosides of the seeds, L. Zechner and J. Kellermayer (Univ. Graz, Austria). *Scientia Pharm.* 21, 153-61 (1953); cf. C.A. 47, 10803d. —The seeds of *Cynanchum vincetoxicum* were extd. and the exts. sepd. into the same 8 fractions as with the roots; the Pb(OH)₂ step was omitted in the purification. Fractions V, VI, Va, and VIa were largely colored materials. Fractions III, IV, and a mixt. of III and IV, m. 125-9°, 133-6°, and 141-14°, resp. The color reactions and the behavior of the sepls. on warming were the same as those of the root glycosides. John Howe Scott

ZECHNER, Z.

Case of trichobezoar in the stomach of child. Acta chir.
iugosl. 4 no.1:84-87 1957.

1. Kirurska klinika Medicinskog Fakulteta u Zagrebu (Predstojnik:
prof. dr. D. Juzbasic).

(BEZOARS, in inf. & child
stomach trichobezoar (Ser))

(STOMACH, foreign bodies
trichobezoar in child (Ser))

13C A-1

CRYSTALLISATION OF CALCIUM FLUORIDE FROM THE
fused state. E. V. ZECHNOVITSEV (J. Phys. Chem.
Russ., 1937, 9, 88-99).— CaF_2 was fused in ZrO_2
crucibles. The largest single crystals obtained were
<5 mm. No transparent agglomerations could be
obtained by re-melting. One of the main causes of
failure was the decomp. of CaF_2 with the formation
of ~3% of CaO . E. R.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

REGION 47414V
031431 Cde QM7 151

ZECEVIC, LJ.

Tests in pollen germination in some fruit species.

p. 101 (Belgrade, Institut za fiziologiju razvika, genetiku i selekciju. Zbornik Radova. No. 4, 1956. Beograd, Yugoslavia)

Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 2,
February 1958

ZECKOVIC, Vladimir (Zagreb)

Geodesy in checking the landslide of Zalasina. Gradovinar 13
no.11:348-356 N '61.

ZEDANIYA, G. M.
USSR/Medicine - Scarlet fever

FD-2301

Card 1/1 Pub 148 - 2/36

Author : Kvitashvili, G. V.; Elizbarashvili, L. N.; Bibineyshvili, M. V.;
Zedaniya, G. M.

Title : The clinical and epidemiological characteristics of scarlet fever
on the basis of data collected at a clinic of infectious diseases
during 1931-1947

Periodical : Zhur. mikro. epid. i immun. No 2, 10-13, Feb 1955

Abstract : Outline the clinical and epidemiological aspects of scarlet fever
in Tbilissi during 1931-47, considering infection with this dis-
ease as a single, uninterrupted epidemiological process extending
over 14 years. State that the average lethality from scarlet
fever during this period was 8.9% and that the causative factor of
the disease became milder, i.e. produced a less severe form of the
infection towards the end of the period. One graph.

Institution : Clinic of Infectious Diseases, Tbilissi Medical Institute

Submitted : August 10, 1953.

JELINEK, Milos; VALOUCH, Miloslav; FUKSA, Josef; ZEDEK, Miloslav

Report of the meeting of the Central Committee of the Association
of Czechoslovak Mathematicians and Physicists held in Prague on
November 2, 1960.

ZEDEK, M.

"130th birthday of Professor Frantisek Tilser, founder of Czech descriptive geometry." p. 89.

OLOMOUC, CZECHOSLOVAK REPUBLIC. VYSOKA SKOLA PEDAGOGICKA. SBORNIK. PRIRODNI VEDY. Olomouc, Czechoslovakia, No. 3, 1957.

Monthly List of East European Accessions (EEAI), LC, VOL. 8, NO. 8, August, 1959.
Uncl.

ZEDEK, S.; HYNEK, S.; BARTAKOVA, Z.

Differential thermal analysis and its application to the study of catalysts.
p. 151. (SILIKATY, Vol. 1, No. 2, 1957, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 12, Dec 1957. Uncl.

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964210018-9

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964210018-9"

5(4)

SOV/78-4-6-15/44

AUTHORS: Spitsyn, I. Vikt., Zedelashvili, Ye. N.

TITLE: Investigation of the Isotopic Exchange of Tungsten in Sodium-tungsten Bronzes (Issledovaniye izotopnogo obmena vol'frama v natriy-vol'framovykh bronzakh)

PERIODICAL: Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 6, pp 1305-1308 (USSR)

ABSTRACT: The isotopic exchange of the tungsten atoms in the tungsten bronzes was investigated by means of the radioactive isotope W^{185} ($T_{1/2} = 73.2$ days). Sodium-tungsten bronzes were produced according to the method of O. Brunner. The results showed that the tungsten atoms in the sodium-tungsten bronzes are equivalent. The investigation results of the yellow and purple tungsten bronzes are given in tables 1 and 2. The synthesis of the tungsten bronzes from $NaWO_4$ and low tungsten oxides was carried out in the vacuum furnace (construction given in figure 1). The formulas $NaWO_3$ or $Na_2O.W_2O_5$ are suggested for the golden yellow tungsten bronzes. The formula $Na_2O.W_3O_8$ was suggested for the purple bronze. Two tungsten atoms in

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SOV/78-4-6-15/44

Investigation of the Isotopic Exchange of Tungsten in Sodium-tungsten
Bronzes

this formula are pentavalent, one atom hexavalent. No isotopic exchange takes place between the solid phases Na_2WO_4 and the low oxides of tungsten at 400° . This is also the case in normal sodium tungsten solutions which contain active low tungsten oxides after six hours heating up to the boiling point. There are 1 figure, 2 tables, and 8 references, 1 of which is Soviet.

ASSOCIATION: Institut fizicheskoy khimii Akademii nauk, SSSR
(Institute of Physical Chemistry of the Academy of Sciences,
USSR)

SUBMITTED: December 29, 1958

Card 2/2

5 (2)

AUTHORS:

Spitsyn, Vikt. I., Zedelashvili, Ye. N. SOV/78-4-8-14/43

TITLE:

The Investigation of the Exchange of Tungsten Isotopes in Some Isopolywolframates (Izucheniye izotopnogo obmena vol'frama v nekotorykh izopolivol'framatakh)

PERIODICAL:

Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 8, pp 1794 - 1796 (USSR)

ABSTRACT:

Previous papers by the authors (Refs 1,2) point to the different linkage of the second sulphur atom in $S_2O_7^{2-}$. The mobility of the S-atoms decreases with increasing diameter of the cation. In this paper a parallel investigation of isopolywolframates is carried out. In this connection it is assumed that due to the longer diameter of the tungsten atom the linkage in the anion is less covalent and more ion-like. Mercury salt was separated from Na_2WO_4 with W^{185} ($T_1 = 73.2$ days), by annealing it was transformed into marked anhydride of tungstic acid and the distribution of radioactive tungsten was investigated after the following reaction carried out at 700° :

Card 1/3

The Investigation of the Exchange of Tungsten
Isotopes in Some Isopolywolframates

SOV/78-4-8-14/43

$\text{WO}_3 + \text{Na}_2\text{WO}_4 = \text{Na}_2\text{W}_2\text{O}_7$; $2\text{WO}_3 + \text{Na}_2\text{W}_2\text{O}_7 = \text{Na}_2\text{W}_4\text{O}_{13}$. In the hydrogen current a reduction of the additional anhydride of tungstic acid takes place at 700° : $\text{Na}_2\text{W}_2\text{O}_7 + 3\text{H}_2 = \text{Na}_2\text{WO}_4 + \text{W} + 3\text{H}_2\text{O}$; $\text{Na}_2\text{W}_4\text{O}_{13} + 9\text{H}_2 = \text{Na}_2\text{WO}_4 + 3\text{W} + 9\text{H}_2\text{O}$. Table 1 shows the isotopic exchange in diwolframate, table 2 in tetra-wolframate. The marked tungsten of WO_3 is regularly distributed. The tungsten atoms are therefore equivalent in the poly-wolframates. By this fact they differ from sodium pyrosulphate. For the complex ion $\text{W}_2\text{O}_7^{2-}$ the structure $\begin{bmatrix} \text{O} & \text{O} \\ \text{OWO} & \text{WO} \\ \text{O} & \text{O} \end{bmatrix}^{2-}$ is assumed, whereas in pyrosulphate the SO_4^{2-} -ion probably maintains a certain individual character: $[\text{SO}_4 \cdot \text{SO}_3]$. No isotopic exchange takes place between a solution of Na_2WO_4 and metallic tungsten or WO_3 . In the solid phase the exchange takes place only after

Card 2/3

The Investigation of the Exchange of Tungsten
Isotopes in Some Isopolywolframates

SOV/78-4-8-14/43

the formation of the polywolframates. There are 2 tables and
4 Soviet references.

ASSOCIATION: Institut fizicheskoy khimii Akademii nauk SSSR (Institute of
Physical Chemistry of the Academy of Sciences, USSR)

SUBMITTED: December 29, 1958

Card 3/3

ZEDEIASHVILI, Ye. N.

Dissertation: "Study of Isotope Exchange in Certain Isopoly-compounds of Wolfram and Sulfur." Cand Chem Sci, Inst of Physical Chemistry, Acad Sci USSR, 20 May 54.
Vecherryaya Moskva, Moscow, 11 May 54.

SO: SUM 284, 26 Nov 1954

41360

S/081/62/000/018/003/059
B101/B186

5.4600

AUTHOR: Zedelashvili, Ye. N.

TITLE: Transformation of o-nitro-aniline under the action of gamma radiation

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 18, 1962, 54, abstract 18B370 (Soboshch. AN GruzSSR, v. 27, no. 5, 1961, 541 - 545, Rus.)

TEXT: When aqueous, air-saturated solutions of o-nitro-aniline are irradiated with Co⁶⁰ gamma rays the changes in the color of the solution and formation of a brown precipitate are observed. Methods of extraction and chromatography showed the formation of a colorless substance, well soluble in ether and not extractable by benzene (absorption maximum in the range 250 - 280 mμ), as well as of brown and pink-reddish substances. The results obtained by IR analysis of the brown precipitate allow the assumption that hydroxylation occurs in the radiolysis of o-nitro-aniline. [Abstracter's note: Complete translation.]

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ZEDELASHVILI, Ye.N.

Physicochemical properties of the radiolysis product of crystalline
o-nitroaniline. Dokl. AN SSSR 164 no.2:334-335 S '65.

(MIRA 18:9)

1. Institut fizicheskoy i organicheskoy khimii im. P.G.
Melikishvili AN GruzSSR. Submitted February 13, 1965.

SOURCE CODE: UR/0241/65/010/001

L 21341-66 EXT(m)
ACC NR: AP6014654

AUTHOR: Zedgenidze, G. A.

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TITLE: Postradiation recovery processes at the level of the organism, the tissues, and the cell

SOURCE: Meditsinskaya radiologiya, v. 10, no. 0, 1965, 5-17

TOPIC TAGS: radiation biologic effect, biologic metabolism, radiation sickness, ionizing radiation

ABSTRACT: The author surveys present knowledge of the processes of post-radiation recovery, particularly at the cellular and subcellular levels. These processes still remain largely unexplored in view of their complexity and the extreme diversity of their duration and clinical symptoms. The only definite thing is that the period of postradiation recovery is extremely long. Furthermore, clinical studies of the recovery of the functions and structures of different organs and systems of experimentally irradiated animals, as well as studies of the course of the process of tissue regeneration and of recovery at the cellular and subcellular levels point to the unity of these phenomena at every level of biological organization. Thus, research into the features of the postradiation recovery of cells contributes

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to a better understanding of the postradiation recovery of the integral organism. Conversely, proper regulation of metabolism in the irradiated organism may markedly contribute to the recovery of its cells and hence also to the effectiveness of the subsequent regenerative process. Research in this direction has already been initiated. The studies performed so far indicate that the rate of the process of recovery always depends on the physiological state of the organism and the cell as a whole. It is also evident that this recovery is never complete, since radiation injuries always include an irreversible component. This -- the ratio of reversible to irreversible changes due to ionizing radiation at the level of the integral organism -- is another aspect that remains virtually uninvestigated and widely debated, and requires special research. Orig. art. has: 7 figures. [JPRS]

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Card 2/2 *ULR*

ZEDGINIDZE, A. S.; BYUS, A. V.

New design of a separating chamber. Trudy GPI [Gruz.] no. 4:
59-72: '63. (MIRA 17:5)